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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/571,883	03/13/2006	Reinhold Klipper	CH8413/LeA 36,760	4607
7590	11/15/2006		EXAMINER	
Jennifer R Seng Patent Department LANXESS CORPORATION 111 RIDC West Park Drive Pittsburgh, PA 15275-1112			BERNSHTEYN, MICHAEL	
			ART UNIT	PAPER NUMBER
			1713	
DATE MAILED: 11/15/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/571,883	KLIPPER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Michael Bernshteyn	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-7 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-7 is/are rejected.
- 7) Claim(s) 3 and 4 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 2 recites the limitation "obtainable" in the line 2.

This rationale is applicable to polymer "obtainable" by a stated process because any variation in any parameter within the scope of the claimed process would change the polymer produced. One who made or used a polymer made by a process other than the process cited in the claim would have to produce a polymer using all possible parameters within the scope of the claim, and then extensively analyze each product to determine if this polymer was obtainable by a process within the scope of the claimed process. See Ex parte Tanksley, 26 USPQ 2d 1389. Appropriate correction is required.

2. Claims 3, 5 and 7 provide for the use of ion exchangers and the apparatus, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 3, 5 and 7 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App.

1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

### ***Claim Objections***

3. Claims 3 and 4 are objected to because of the following informalities: the use of the phrase "preferably" to link a broad range of values with a narrow range of values renders the claims awkward and not in compliance with the current US practice. It is not clear which range controls the actual metes and bounds of the claimed subject matter. It is suggested to put preferable range in the dependent claims. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Karlou-Eyrisch et al. (U. S. Patent Application Publication 2002/0106659).

Karlou-Eyrisch discloses crosslinked bead polymers doped with superparamagnetic iron oxide and a process for the preparation of the bead polymers (abstract).

With regard to the limitations of claims 1 and 2, Karlou-Eyrisch discloses a process for preparing crosslinked **bead polymers**, which is characterized in that a

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monomer mixture of hydrophilic (meth)acrylate, amino (meth)acrylate, crosslinker and, where appropriate, other monomer is polymerized to beads by inverse suspension polymerization, and the latter are then doped with superparamagnetic **iron oxide** by an after-treatment with iron salt solution (page 2, [0024]).

Karlou-Eyrisch discloses that the sample is mixed with the bead polymer according to the invention at a pH of 7 or below, preferably in the range from 2 to 6, particularly preferably in the range from 2 to 3, at room temperature. The bead polymer is removed with the aid of a magnetic field. The complex of nucleic acid and bead polymer obtained in this way can then be purified by washing with suitable buffers (page 3, [0046]). To liberate the bound nucleic acids from the complex, the pH of the complex is then adjusted to pH values above 7, preferably from 8 to 14, particularly preferably in the range 12 to 14 (page 3, [0047]).

The iron salts taken up by the swollen bead polymer are converted into the corresponding iron hydroxides by adding bases. Alkaline solutions of sodium hydroxide, sodium carbonate or ammonia are very suitable. Ammonia is preferred because excess can easily be removed by evaporation. Ammonium salts formed are removed by thorough washing with water (page 3, [0037]).

Therefore, all the limitations of claims 1 and 2 are expressly met by Karlou-Eyrisch.

5. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Hosoda et al. (JP 09-225298).

With regard to the limitations of claims 1-7, Hosoda discloses a **cation exchange resin** and/or chelate resin comprising iron oxide and a method of removing **arsenic** from the solutions with the help of the above-mentioned resin (abstract).

Hosoda discloses alkali treatment of cation exchange resin and the chelating resin using sodium hydroxide and potassium hydroxide as desirable compounds for adjusting **pH to 4-10** and less than 13, which is within the claimed range (page 3, [0016], [0018], [0020]).

Hosoda discloses glass column containing apparatus, which include cation exchange resin and/or chelate resin with 20-48 meshes of grain size for absorbing of arsenic (page 3, [0022], page 5, [0031]). It was clearly shown, that it is not necessary to use a lot of flocculants like the conventional coagulating sedimentation, and arsenic can be collected effectively (page 6, [0035]).

### ***Double Patenting***

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

6. Claims 1-7 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-7 of copending Application No. 11/299,098. This is a

provisional double patenting rejection since the conflicting claims have not in fact been patented.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Bernshteyn whose telephone number is 571-272-2411. The examiner can normally be reached on M-F 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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MB  
11/09/2006

  
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PRIMARY EXAMINER